

Working in paediatric emergency medicine

In the UK 25–30% of all patients attending emergency departments are paediatric (0–16 years), requiring specialist skills in the assessment and management of ill and injured children. Paediatric emergency medicine has developed from recognition that high quality paediatric care in the emergency department improves management of these children. Current UK child mortality rates are unacceptable, particularly when compared with other high-income countries (Wolfe et al, 2014). In the same paper, the Royal College of Paediatrics and Child Health and National Children's Bureau identify that mental health and injury are key components of UK child mortality. Presentations within these domains fall within the scope of paediatric emergency medicine, as outlined below, further supporting development of the sub-specialty.

There is a wide variation in the provision of paediatric emergency medicine-trained consultants across the UK according to geographical location; Davies and Newton (2015) identified only half the number of UK paediatric emergency medicine consultants per capita when compared with the USA and Australasia.

The Royal College of Paediatrics and Child Health set out an agenda (Facing the Future) in 2015 to improve child health and mortality in the UK: delivering quality paediatric emergency care is key in achieving this goal, hence the growing demand for sub-specialty paediatric emergency medicine consultants from both emergency medicine and paediatric backgrounds. This editorial

provides insight into this exciting area with the aim of contributing to a positive recruitment drive for the future.

Paediatric emergency medicine

Paediatric emergency medicine encompasses working with paediatric patients who present to the emergency department; UK sub-specialty training can be accessed via emergency medicine or paediatric training. The diverse nature of paediatric emergency medicine demands good communication, empathy, a broad knowledge base and diverse skillset. Presenting problems range from simple coughs and colds to major trauma, medical emergencies, sudden unexpected infant death and acute mental health episodes. The work involves a diverse multidisciplinary team, liaising closely with colleagues of all specialties in primary, secondary and tertiary care, as well as adult emergency medicine. Paediatric emergency medicine also has a key role in child protection, identifying subtle signs that raise safeguarding concerns or highlight the need for additional family support.

Required attributes

As with any specialty, there are elements that attract and those that deter trainees. Paediatric emergency medicine is an exciting sub-specialty with daily communication and clinical challenges, practical hands-on work with children, a diverse presenting patient population and daily learning opportunities for clinicians of all levels. Enthusiasm is key, as well as the ability to think quickly, multitask, work well under pressure, demonstrate leadership skills, and work well within a team. Owing to the nature of the specialty, out-of-hours and shift work is essential and so does not suit every individual, but there are flexible shift pattern opportunities to suit both full-time and less than full-time working.

Managing acutely unwell and severely injured children can be emotionally challenging, but the vast majority of the time it is extremely rewarding. The sense of teamwork and support felt when working in a 'well-oiled' and high functioning emergency

department is infectious and promotes confidence alongside self-development in those who thrive in this environment.

There is a growing body of advanced nurse practitioner roles in paediatric emergency medicine with a number of departments providing high quality training and championing practitioners to then use their skills within smaller units or departments. Trainees increasingly work alongside advanced nurse practitioners, with both parties drawing from their own expertise and learning from each other.

Following paediatric emergency medicine training, there are multiple career options depending on the core training background. There is scope to expand interest or combine work with the paediatric intensive care or high dependency unit, child protection, general and community paediatrics, trauma, child and adolescent mental health, pre-hospital care, adult emergency medicine, research and education.

Entry routes and training

Trainees must complete core training in either paediatrics or emergency medicine and are eligible to apply for competitive sub-specialty training during higher specialist training.

Paediatric training consists of an 8-year run-through training programme with options to apply to national grid paediatric emergency medicine sub-specialty training during ST5–7. For paediatric trainees, the additional training required consists of 12 months' full-time equivalent in a paediatric emergency department, at least 3 months (usually 6 months) in paediatric intensive care and anaesthetics, and 6 months in paediatric surgical specialties and orthopaedics.

Emergency medicine follows a 6-year training pathway: 3 years of core training followed by higher specialist training. The paediatric emergency medicine training programme for emergency medicine trainees includes 6 months in paediatric emergency medicine, 3 months of paediatric intensive care and 3 months of general paediatrics to achieve the necessary competencies.

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This experience will add 12 months to the emergency medicine training programme. Paediatric emergency medicine training positions are currently advertised at deanery level and do not involve a single yearly national recruitment process.

Further information for both routes into paediatric emergency medicine can be found on the respective college websites (www.rcem.ac.uk; www.rcpch.ac.uk).

Trainees will be exposed to sub-specialties they may not have experienced before such as paediatric intensive care or transfer and retrieval teams like 'KIDS' (Kids Intensive Care and Decision Support). The different environments allow trainees to work alongside other junior doctors, consultants and professionals outside the emergency department in specialties such as anaesthetics, surgery and pre-hospital medicine. In placements like these key skills such as preparing a patient for transfer, intubation and central line placement can be developed in patients from neonates to adolescents.

Paediatric emergency medicine consultant options

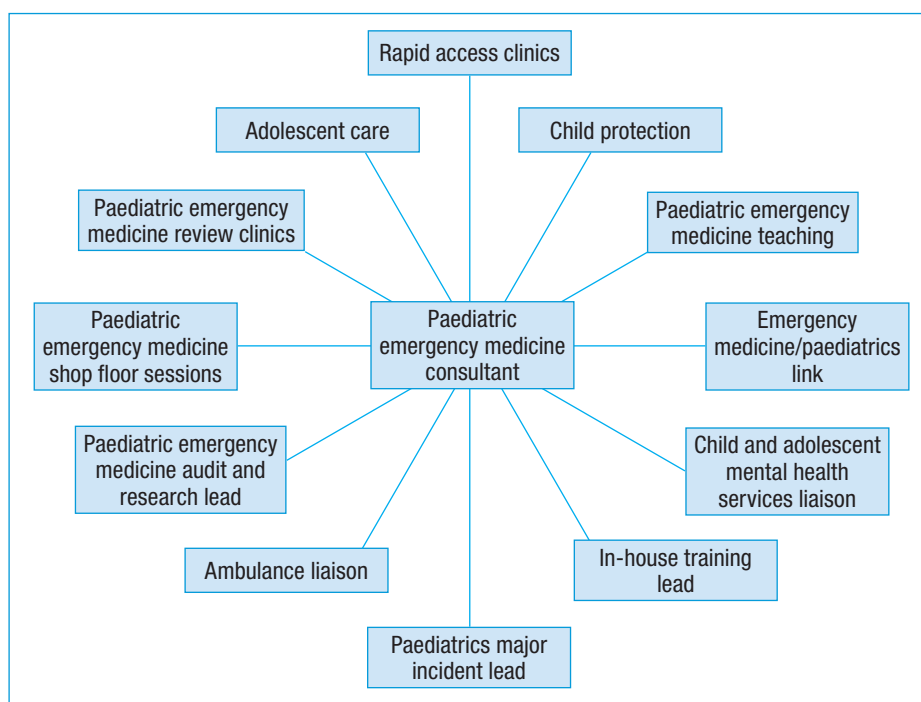
An emergency medicine consultant with paediatric sub-specialty training will predominantly continue to manage both adults and children within the emergency department but may well oversee the running

of the children's section of the emergency department with input from paediatric colleagues. He/she may spend more allocated time working within the children's emergency department than other colleagues.

A paediatric consultant with a paediatric emergency medicine specialist interest may work mainly in general paediatrics and have on calls within a children's emergency department or may work mainly within a tertiary centre children's emergency department. He/she has the opportunity to combine his/her work within a children's emergency department with any number of other paediatric sub-specialty opportunities, such as child protection, paediatric intensive care, high dependency care, general or ambulatory paediatrics. In the emergency department the paediatric emergency medicine consultant may run resuscitation efforts, trauma alert calls, and supervise junior doctors performing procedures. Overnight on calls can be resident or non-resident depending on the hospital.

Paediatric emergency medicine consultants play a role in a number of areas (Figure 1) which vary depending on their personal expertise, interests and the hospital at which they are based. The Royal College of Emergency Medicine provides sample job plans for paediatric emergency medicine consultants from both backgrounds.

Figure 1. The roles of the paediatric emergency medicine consultant. From Royal College of Emergency Medicine (2016).



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KEY POINTS

- Current UK child mortality rates are unacceptable.
- Mental health and injury contribute significantly to UK child mortality.
- Around 25–30% of emergency department patients are paediatric.
- Specialist services and increased numbers of paediatric emergency medicine-trained consultants will help to improve current mortality rates and bring the service provision in the UK more in line with similar countries.

Conclusions

Paediatric emergency medicine is a diverse and exciting specialty with scope for expansion as the demand for specialist skills increases. The Association of Paediatric Emergency Medicine (2016) says the following about paediatric emergency medicine:

‘If you enjoy lots of areas of paediatrics and have the attention span of a small toddler, then paediatric emergency medicine is the perfect career for you. From coughs and colds to major trauma, you never know what you’ll be dealing with from one minute to the next. The EM paediatrician is at the front line of paediatrics, combining adrenaline-fuelled resuscitations with that happy feeling of explaining simple things to children and their parents. It’s a great team-based specialty, with opportunities in research, teaching, practical procedures, HDU, trauma, you name it, we do it.’ BJHM

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